## AMENDMENTS TO THE CLAIMS

Please amend the claims as indicated hereafter.

1. (Currently Amended) In a terminal of a conditional access system in which a user selects a service, the selected service being associated with a frequency, the terminal having a tuner and a secure element with at least one authorized entitlement unit number stored therein, a method of determining whether the terminal is authorized to receive the selected service, the method comprising steps of:

receiving at least one encrypted entitlement control message corresponding to the service, wherein each entitlement control message includes a packet identifier (PID) and a payload;

decrypting each of the at least one encrypted entitlement control message in the secure element, each decrypted entitlement control message revealing at least one first entitlement number associated with the selected service, wherein the at least one authorized entitlement unit number is carried in the payload; and

determining that the terminal is authorized to receive the selected service when any first entitlement number of any decrypted entitlement control message represents any number of the at least one authorized entitlement unit number.

2. (Original) The method of claim 1, further comprising initial steps of:

receiving over a permanently available link an entitlement unit table associating the selected service with at least one second entitlement number;

tuning the tuner of the terminal to the frequency associated with the selected service when any of said at least one second entitlement number represents any number of said at least one authorized entitlement unit number.

3. (Original) The method of claim 2, wherein the step of receiving over a permanently available data link includes receiving the entitlement unit table over an out of band data link.

4. (Original) The method of claim 2, wherein the step of receiving over a permanently available link includes receiving the entitlement unit table incorporated in a data packet that is included in a data stream associated with an initial power on frequency that is tunable by the tuner.

5. (Original) The method of claim 2, wherein the step of receiving over a permanently available link includes receiving the entitlement unit table incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

6. (Original) The method of claim 1, wherein the step of decrypting the at least one encrypted entitlement control message includes recovering at least one control word associated with decryption of a video component of the selected service.

7. (Original) The method of claim 1, wherein the step of decrypting the at least one encrypted entitlement control message includes recovering at least one control word associated with decryption of an audio component of the selected service.

8. (Original) The method of claim 1, wherein the step of receiving at least one encrypted entitlement control message includes demodulating an output of the tuner to recover a data component corresponding to the selected service, the data component containing the encrypted entitlement control message.

9. (Original) The method of claim 1, wherein the step of decrypting said at least one encrypted entitlement control message includes recovering at least one control word from said at least one decrypted entitlement control message, each control word being a decryption key for decrypting a corresponding service component of the selected service.

10. (Original) The method of claim 9, further comprising steps of:

recovering a first encrypted service component; and

decrypting the encrypted service component using a first control word of said at least one control word.

B1

11. (Original) The method of claim 1, further comprising steps of:

receiving an encrypted entitlement management message addressed to the terminal; and

decrypting the encrypted entitlement management message in the secure element, the decrypted entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

12. (Original) The method of claim 11, wherein the step of receiving an encrypted entitlement management message includes receiving the encrypted entitlement management message over an out of band data link.

13. (Original) The method of claim 11, wherein the step of receiving an encrypted entitlement management message includes receiving the encrypted entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

14. (Original) The method of claim 1, further comprising steps of:

receiving an entitlement management message addressed to the terminal; and

authenticating the entitlement management message in the secure element, the authenticated entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

15. (Original) The method of claim 14, wherein the step of receiving an entitlement management message includes receiving the entitlement management message over an out of band data link.

16. (Original) The method of claim 14, wherein the step of receiving an entitlement management message includes receiving the entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

17. (Currently Amended) In a terminal of a conditional access system in which a user selects a service, the selected service being associated with a frequency, the terminal having a tuner and a secure element with at least one authorized entitlement unit number stored therein, a method of determining whether the terminal is authorized to receive the selected service, the method comprising steps of:

receiving at least one entitlement control message corresponding to the service, wherein each entitlement control message includes a packet identifier (PID) and a payload;

authenticating each of the at least one entitlement control message in the secure element, each authenticated entitlement control message revealing at least one first entitlement number associated with the selected service, wherein the at least one authorized entitlement unit number is carried in the payload; and

determining that the terminal is authorized to receive the selected service when any first entitlement number of any authenticated entitlement control message represents any number of the at least one authorized entitlement unit number.

18. (Original) The method of claim 17, further comprising initial steps of:

receiving over a permanently available link an entitlement unit table associating the selected service with at least one second entitlement number;

tuning the tuner of the terminal to the frequency associated with the selected service when any of said at least one second entitlement number represents any number of said at least one authorized entitlement unit number.

19. (Original) The method of claim 18, wherein the step of receiving over a permanently available data link includes receiving the entitlement unit table over an out of band data link.

20. (Original) The method of claim 18, wherein the step of receiving over a permanently available link includes receiving the entitlement unit table incorporated in a data packet that is included in a data stream associated with an initial power on frequency that is tunable by the tuner.

21. (Original) The method of claim 18, wherein the step of receiving over a permanently available link includes receiving the entitlement unit table incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

22. (Original) The method of claim 17, wherein the step of authenticating the at least one entitlement control message includes recovering at least one control word associated with decryption of a video component of the selected service.

23. (Original) The method of claim 17, wherein the step of authenticating the at least one entitlement control message includes recovering at least one control word associated with decryption of an audio component of the selected service.

24. (Original) The method of claim 17, wherein the step of receiving at least one entitlement control message includes demodulating an output of the tuner to recover a data component corresponding to the selected service, the data component containing the entitlement control message.

25. (Original) The method of claim 17, wherein the step of authenticating said at least one entitlement control message includes recovering at least one control word from said at least one entitlement control message, each control word being a decryption key for decrypting a corresponding service component of the selected service.

26. (Original) The method of claim 25, further comprising steps of:

recovering a first encrypted service component; and

decrypting the encrypted service component using a first control word of said at least one control word.

27. (Original) The method of claim 17, further comprising steps of:

receiving an encrypted entitlement management message addressed to the terminal; and

decrypting the encrypted entitlement management message in the secure element, the decrypted entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

28. (Original) The method of claim 27, wherein the step of receiving an encrypted entitlement management message includes receiving the encrypted entitlement management message over an out of band data link.

29. (Original) The method of claim 27, wherein the step of receiving an encrypted entitlement management message includes receiving the encrypted entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

30. (Original) The method of claim 17, further comprising steps of:

receiving an entitlement management message addressed to the terminal; and

authenticating the entitlement management message in the secure element, the authenticated entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

31. (Original) The method of claim 30, wherein the step of receiving an entitlement management message includes receiving the entitlement management message over an out of band data link.

32. (Original) The method of claim 30, wherein the step of receiving an entitlement management message includes receiving the entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

B1

33. (Original) In a terminal of a conditional access system, the terminal including a tuner and a selector for selecting a service, the selected service being identified by a corresponding service number and frequency, a conditional access apparatus comprising:

a processor having plural control modules, a first control module controlling the processor to receive at least one encrypted entitlement control message corresponding to the selected service; and

a secure element having at least one authorized entitlement unit number stored therein and having plural control modules, a second control module controlling the secure element to decrypt each of the at least one encrypted entitlement control message, each decrypted entitlement control message revealing at least one first entitlement number associated with the selected service, a third control module controlling the secure element to determine that the terminal is authorized to receive the selected service when any first entitlement number of any decrypted entitlement control message represents any number of the at least one authorized entitlement unit number.

34. (Original) The apparatus of claim 33, wherein:

the processor further includes a fourth control module controlling the processor to receive over a permanently available link an entitlement unit table associating the selected service with at least one second entitlement number; and

the processor further includes a fifth control module controlling the processor to tune the tuner of the terminal to the frequency associated with the selected service when any of said at least one second entitlement number represents any number of said at least one authorized entitlement unit number.

35. (Original) The apparatus of claim 34, wherein the fourth control module includes a control module to receive the entitlement unit table over an out of band data link.

36. (Original) The apparatus of claim 34, wherein the fourth control module includes a control module to receive the entitlement unit table incorporated in a data packet that is included in a data stream associated with an initial power on frequency that is tunable by the tuner.

37. (Original) The apparatus of claim 34, wherein the fourth control module includes a control module to receive the entitlement unit table incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

38. (Previously Amended) The apparatus of claim 33, wherein the second control module includes a control module to recover at least one control word associated with decryption of a video component of the selected service.

39. (Original) The apparatus of claim 33, wherein the second control module includes a control module to recover at least one control word associated with decryption of an audio component of the selected service.

40. (Original) The apparatus of claim 33, wherein the first control module includes a control module to demodulate an output of the tuner to recover a data component corresponding to the selected service, the data component containing the encrypted entitlement control message.

41. (Original) The apparatus of claim 33, wherein the second control module includes a control module to recover at least one control word from said at least one decrypted entitlement control message, each control word being a decryption key for decrypting a corresponding service component of the selected service.

42. (Original) The apparatus of claim 41, further comprising:

a fourth control module to control the processor to recover a first encrypted service component; and

a decryptor to decrypt the encrypted service component using a first control word of said at least one control word.

43. (Original) The apparatus of claim 33, further comprising:

a fourth control module to control the processor to receive an encrypted entitlement management message addressed to the terminal; and

a fifth control module to control the secure element to decrypt the encrypted entitlement management message, the decrypted entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

44. (Original) The apparatus of claim 43, wherein the fourth control module includes a control module to receive the encrypted entitlement management message over an out of band data link.

45. (Original) The apparatus of claim 43, wherein the fourth control module includes a control module to receive the encrypted entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

B1

46. (Original) The apparatus of claim 33, further comprising:

a fourth control module to control the processor to receive an entitlement management message addressed to the terminal; and

a fifth control module to control the secure element to authenticate the entitlement management message, the authenticated entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

47. (Original) The apparatus of claim 46, wherein the fourth control module includes a control module to receive the entitlement management message over an out of band data link.

48. (Original) The apparatus of claim 46, wherein the fourth control module includes a control module to receive the entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

49. (Original) In a terminal of a conditional access system, the terminal including a tuner and a selector for selecting a service, the selected service being identified by a corresponding service number and frequency, a conditional access apparatus comprising:

a processor having plural control modules, a first control module controlling the processor to receive at least one entitlement control message corresponding to the selected service; and

a secure element having at least one authorized entitlement unit number stored therein and having plural control modules, a second control module controlling the secure element to authenticate each of the at least one entitlement control message, each entitlement control message revealing at least one first entitlement number associated with the selected service, a third control module controlling the secure element to determine that the terminal is authorized to receive the selected service when any first entitlement number of any authenticated entitlement control message represents any number of the at least one authorized entitlement unit number.

B1

50. (Original) The apparatus of claim 49, wherein:

the processor further includes a fourth control module controlling the processor to receive over a permanently available link an entitlement unit table associating the selected service with at least one second entitlement number; and

the processor further includes a fifth control module controlling the processor to tune the tuner of the terminal to the frequency associated with the selected service when any of said at least one second entitlement number represents any number of said at least one authorized entitlement unit number.

51. (Original) The apparatus of claim 50, wherein the fourth control module includes a control module to receive the entitlement unit table over an out of band data link.

52. (Original) The apparatus of claim 50, wherein the fourth control module includes a control module to receive the entitlement unit table incorporated in a data packet that is included in a data stream associated with an initial power on frequency that is tunable by the tuner.

53. (Original) The apparatus of claim 50, wherein the fourth control module includes a control module to receive the entitlement unit table incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

54. (Previously Amended) The apparatus of claim 49, wherein the second control module includes a control module to recover at least one control word associated with decryption of a video component of the selected service.

55. (Original) The apparatus of claim 49, wherein the second control module includes a control module to recover at least one control word associated with decryption of an audio component of the selected service.

56. (Original) The apparatus of claim 49, wherein the first control module includes a control module to demodulate an output of the tuner to recover a data component corresponding to the selected service, the data component containing the entitlement control message.

57. (Original) The apparatus of claim 49, wherein the second control module includes a control module to recover at least one control word from said at least one entitlement control message, each control word being a decryption key for decrypting a corresponding service component of the selected service.

58. (Original) The apparatus of claim 57, further comprising:

a fourth control module to control the processor to recover a first encrypted service component; and

a decryptor to decrypt the encrypted service component using a first control word of said at least one control word.

59. (Original) The apparatus of claim 49, further comprising:

a fourth control module to control the processor to receive an encrypted entitlement management message addressed to the terminal; and

a fifth control module to control the secure element to decrypt the encrypted entitlement management message, the decrypted entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

60. (Original) The apparatus of claim 59, wherein the fourth control module includes a control module to receive the encrypted entitlement management message over an out-of-band data link.

61. (Original) The apparatus of claim 59, wherein the fourth control module includes a control module to receive the encrypted entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

62. (Original) The apparatus of claim 49, further comprising:

a fourth control module to control the processor to receive an entitlement management message addressed to the terminal; and

a fifth control module to control the secure element to authenticate the entitlement management message, the authenticated entitlement management message including an update of at least one authorized entitlement unit number to be stored in the secure element.

63. (Original) The apparatus of claim 62, wherein the fourth control module includes a control module to receive the entitlement management message over an out of band data link.

64. (Original) The apparatus of claim 62, wherein the fourth control module includes a control module to receive the entitlement management message incorporated in a data packet that is included in a data stream associated with each frequency that is tunable by the tuner.

65. (New) A method of providing a service in a conditional access system, the method implemented in a terminal and comprising the steps of:

receiving a stream of packets, the stream of packets including packets comprising the service and entitlement control messages (ECMs) for the service;

determining a first entitlement unit number for the service;

determining whether the terminal is authorized to access the service based upon the first entitlement unit number and an authorized entitlement unit number that is stored in a memory of the terminal; and

responsive to determining the terminal is not authorized, displaying something other than the service.

66. (New) The method of claim 65, wherein responsive to determining the terminal is authorized to access the service further including the steps of:

parsing ECMs for the service from the stream of packets, wherein each ECM includes a second entitlement unit number that is carried in the payload of the ECM;

confirming that the terminal is authorized to access the service based upon the second entitlement unit number and the authorized entitlement unit number;

responsive to confirming that the terminal is authorized further including the steps of:

recovering control words from the received ECMs;

decrypting the service using the recovered control words; and

displaying the service.

B1

67. (New) The method of claim 66, wherein a user is currently viewing a second service, and wherein the something other that is displayed is a third service.

68. (New) The method of claim 67, wherein the third service is a predetermined service.

69. (New) The method of claim 68, wherein the predetermined service is a barker service.

70. (New) The method of claim 66, wherein a user is currently viewing a second service, and wherein the something other that is displayed is a message.

71. (New) The method of claim 66, wherein the message instructs the user to select another service.

72. (New) A method of providing a terminal in a conditional access system with services, the method comprising the steps of:

associating services with entitlement unit numbers;

providing the terminal with an electronic program guide that associates universal service identification numbers to services;

providing the terminal with an entitlement unit table that translates universal service identification numbers to entitlement unit numbers; and

providing the terminal with an authorized entitlement unit number, wherein responsive to the a user selecting a given service, the terminal determines whether the terminal is authorized to access the given service using the electronic program guide, the entitlement unit table, and the authorized entitlement unit number.

73. (New) The method of claim 72, wherein the authorized entitlement unit number is provided to the terminal in an entitlement management message.

74. (New) The method of claim 72, wherein a given entitlement unit number is associated with a plurality of services.

75. (New) The method of claim 72, wherein the terminal is authorized for a first group of services, the first group of services having a first entitlement unit number, and further including the step of:

providing the terminal with a second authorized entitlement unit number, wherein the second authorized entitlement unit number is associated with a second group of services.

76. (New) The method of claim 75, wherein the given service is associated with both the first authorized entitlement unit number and the second authorized entitlement unit number.

77. (New) The method of claim 72, further including the steps of:

providing the services in a stream of packets;

multiplexing entitlement control messages for a given service into the stream of packets, wherein each entitlement control message includes a second entitlement unit number, wherein the terminal confirms that the terminal is authorized to access the given service using the second entitlement unit number and the authorized entitlement unit number.

78. (New) The method of claim 77, wherein the entitlement control messages includes a plurality of entitlement unit numbers.

B1

79. (New) A method of providing a service to a terminal in a conditional access system, the method implemented at the terminal and comprising the steps of:

receiving an electronic program guide that associates universal service identification numbers to services;

receiving an entitlement unit table that translates universal service identification numbers to entitlement unit numbers; and

receiving an authorized entitlement unit number;

receiving user input for a given service;

determining whether the terminal is authorized to access the given service using the electronic program guide, the entitlement unit table, and the authorized entitlement unit number.

80. (New) The method of claim 79, wherein the authorized entitlement unit number is carried in an entitlement management message.

81. (New) The method of claim 79, further including the step of:

storing the authorized entitlement unit number in a memory.

82. (New) The method of claim 81, wherein the memory is included in a secure microprocessor having input/output terminals, and the secure microprocessor is characterized by the memory being unobservable at the input/output terminals.

83. (New) The method of claim 79, responsive to determining that the terminal is authorized to access the given service, further including the steps of:

receiving a stream of packets, the stream of packets including packets comprising the given service and entitlement control messages (ECMs) for the given service;

responsive to determining that the terminal is authorized to access the given service, further including the steps of:

parsing ECMs for the given service from the stream of packets, wherein each ECM includes an entitlement unit number that is carried in the payload of the ECM;

confirming that the terminal is authorized to access the given service based upon the entitlement unit number and the authorized entitlement unit number;

responsive to confirming that the terminal is authorized further including the steps of:

recovering control words from the received ECMs;

decrypting the given service using the recovered control words; and

displaying the given service.

84. (New) The method of claim 83, wherein the entitlement control messages includes a plurality of entitlement unit numbers, and the step of confirming that the terminal is authorized to access the given service further includes the step of:

comparing each of entitlement unit numbers with the authorized entitlement unit number until one of the entitlement unit numbers matches the authorized entitlement unit number, wherein the terminal is authorized to access the given service if there is a match.